

FUDS SEDD Policy Update

Jan W. Dunker 14-Dec-2005



ER 200-3-1

Formerly Used Defense Sites (FUDS) Program Policy

- 7-5.5.2 Staged Electronic Data Deliverable (SEDD). All environmental laboratory chemistry data produced for appropriate FUDS project classifications (except BD/DR) shall be provided in the SEDD format.
 - 7-5.5.2.1 SEDD File Management. All original SEDD data files shall be archived and under direct control of the USACE District PM and sent to PIRS for inclusion in permanent Project File documentation.
 - 7-5.5.2.2 Additional Assistance. The HTRW CX can assist Project and laboratory personnel to better understand what SEDD is and how to implement it.



The SEDD Specification

- SEDD (Staged Electronic Data Deliverable) is designed to be agency and program neutral.
- SEDD is a Specification for developing standardized electronic data deliverable formats for environmental analytical data.
- A Data Element Dictionary along with a Valid Value list have been developed and incorporated into the SEDD Specification.
- Under SEDD, the EDD (Electronic Data Deliverable) from the laboratory is transmitted as an XML document, which is basically an ASCII text file.



Why SEDD?

- Laboratories Produce More than 300 Different Electronic Data Deliverables (EDDs)
- Most EDDs to are Customer-Specific
- Most EDDs are Proprietary
- No EDD Present That Meets Diverse Customer Needs for Detailed Analytical Chemistry Reporting



What is SEDD?

- SEDD uses a common syntax/structure to describe diverse laboratory activities and report analytical data electronically.
- SEDD allows users to link analytical data to underlying laboratory activities and processes to provide full traceability.
- SEDD provides a means for reporting complex analytical relationships.



Data in SEDD

- Data in a SEDD file is stored in a hierarchical structure using nested tags.
- All of the data tags and the data itself is human readable and understandable.
- Many different tools (e.g., viewers, editors and parsers) are available for working with and viewing XML data.
- A typical SEDD XML file would look as follows:

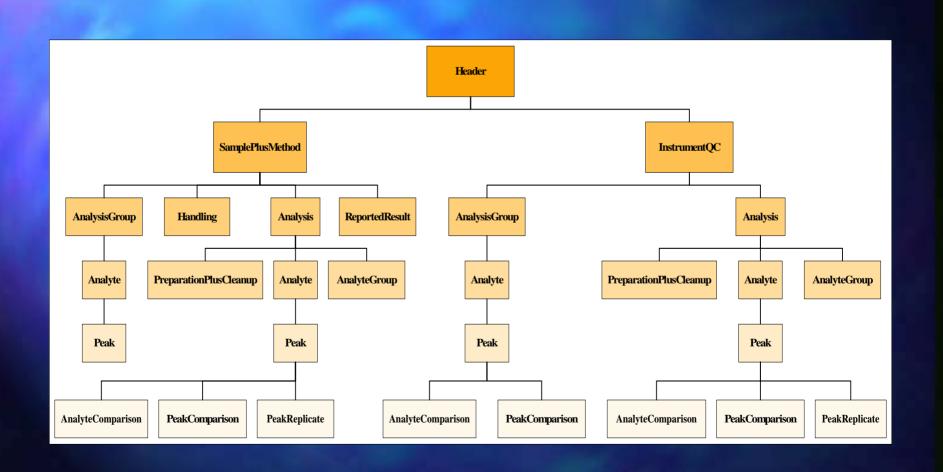
```
<ReportedResult>
```

- <a href="mailto: AnalyteName
- <CASRegistryNumber>71-43-2</CASRegistryNumber>
- <Result>24.2</<Result>
- <ResultUnits>ug/L</ResultUnits>
- </ReportedResult>



US Army Corps of Engineers_®

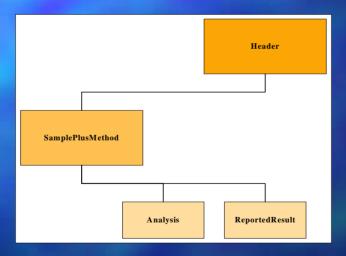
The SEDD Structure





SEDD - Stage 1

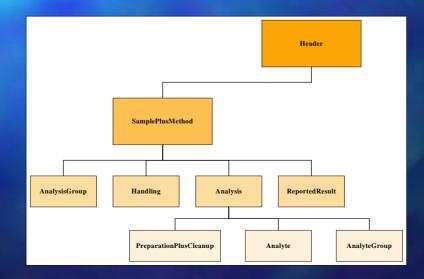
Contains the minimum number of nodes and data elements to transmit results-only data.





SEDD - Stage 2a

- Data content builds on Stage 1 by adding Method Quality Control (QC) data.
- This file contains all of the linkages to relate Method QC data (e.g., MBs, LCSs, MSs, MSDs, Dups) to each reported result.

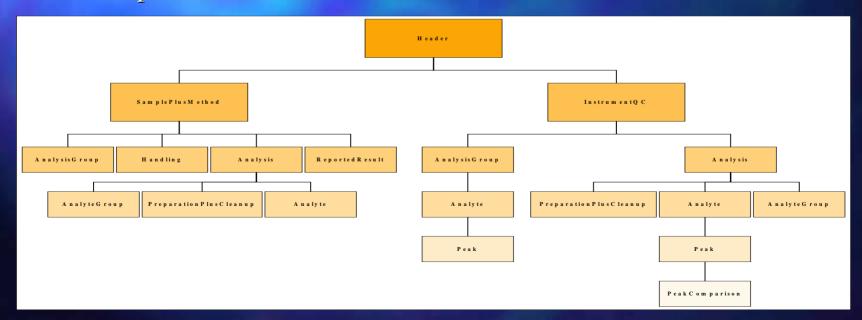




US Army Corps of Engineers_®

SEDD - Stage 2b

- Data content builds on Stage 2a by adding Instrument Quality Control (QC) data.
- This file contains all of the linkages to relate Initial Calibration data and other Instrument QC data (e.g., ICVs, CCVs, Tunes) to each reported result.

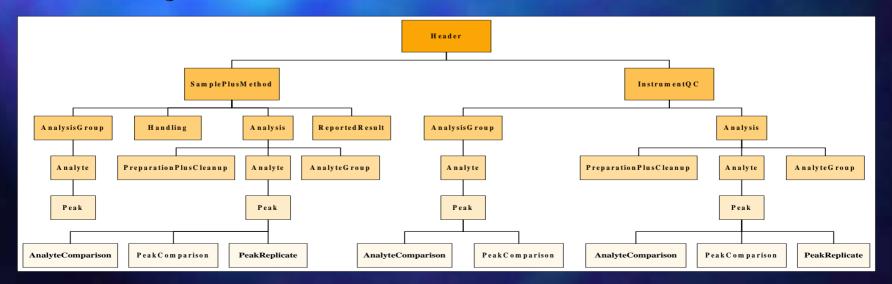




US Army Corps of Engineers_®

SEDD - Stage 3

- Data content builds on Stage 2b by adding additional measurement data to allow for the independent recalculation of reported results.
- Raw instrument data would generally not be used. Corrected instrument data, such as peak areas or corrected intensity readings, would normally be captured.
- This file contains information to associate all standards used to their original vendors and lot numbers.





Information on SEDD

- General information on SEDD can be found at the following CLP SEDD web site: www.epa.gov/superfund/programs/clp/sedd.htm
- The SEDD Specification and Data Element Dictionary for Draft Version 5.0 and the updated version (Draft 5.1) of the SEDD Specification, Data Element Dictionary and the Valid Value list is currently available on EPA's web site.
- DTDs, various example files and sets of instructions for Draft Version 5.0 for Stages 1, 2a, 2b and 3 are also available on the same web site.
- In addition, the CLP implementation of an earlier version of SEDD Draft Version 5.1 (Stage 3) for the CLP organic methods (SOM01.1) is currently posted. The new CLP inorganic methods (ILM06) will also require the data to be reported using SEDD.